Michael B Steer

List of Publications by Year in Descending Order

64 papers	839 citations	18 h-index	27 g-index
68 ext. papers	1,109 ext. citations	2.9 avg, IF	4.05 L-index

#	Paper	IF	Citations
64	Characterization of Intermodulation Distortion in Reconfigurable Liquid Metal Antennas. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 279-282	3.8	22
63	. *IEEE Transactions on Microwave Theory and Techniques*, **2018**, 66, 688-699	4.1	10
62	Power and temperature dependence of passive intermodulation distortion **2018**,		4
61	Abstracted Random Mediums for Electromagnetic Hotspot Observation in Finite-Difference Time-Domain Simulation. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 1873-1879	4.1	2
60	Microstrip Passive Elements **2016**, 339-368		
59	Magnetic Materials and Planar Transmission Lines **2016**, 576-609		
58	Loss and Power-dependent Effects in Microstrip **2016**, 200-226		
57	Passive Intermodulation of Analog and Digital Signals on Transmission Lines With Distributed Nonlinearities: Modelling and Characterization. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 64, 1383-1395	4.1	32
56	The Effect of Chaotic Vibrations on Antenna Characteristics. *IEEE Antennas and Wireless Propagation Letters*, **2016**, 15, 1242-1244	3.8	2
55	. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 474-482	4.9	35
54	An acoustic filter based on layered structure. *Applied Physics Letters*, **2015**, 106, 111903	3.4	27
53	Characterisation of nonlinear distortion and intermodulation in passive devices and antennas **2014**,		15
52	Electromagnetic Properties of Disordered Three-Dimensional Mixtures. *IEEE Access*, **2013**, 1, 778-788	3.5	3
51	Automated Creation of Complex Three-Dimensional Composite Mixtures for Use in Electromagnetic Simulation. *IEEE Access*, **2013**, 1, 248-251	3.5	3
50	Sensitive Vibration Detection Using Ground-Penetrating Radar. *IEEE Microwave and Wireless Components Letters*, **2013**, 23, 680-682	2.6	3
49	Investigation of close-in passive intermodulation distortion on antennas **2013**,		1
48	Passivity Enforcement for Admittance Models of Distributed Networks Using an Inverse Eigenvalue Method. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 8-20	4.1	6

47	High-Performance Solenoidal RF Transformers on High-Resistivity Silicon Substrates for 3D Integrated Circuits. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 2066-2072	4.1	19
46	A Transient Electrothermal Analysis of Three-Dimensional Integrated Circuits. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2012**, 2, 660-667	1.7	6
45	Robust Analog Canceller for High-Dynamic-Range Radio Frequency Measurement. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 1709-1719	4.1	19
44	Analog Negative-Bias-Temperature-Instability Monitoring Circuit. *IEEE Transactions on Device and Materials Reliability*, **2012**, 12, 177-179	1.6	5
43	Characterization of the dynamic range of a single aperture communications system **2012**,		2
42	Standoff Acoustic Modulation of Radio Frequency Signals in a Log-Periodic Dipole Array Antenna. *IEEE Antennas and Wireless Propagation Letters*, **2012**, 11, 885-888	3.8	5
41	A Highly Linear and Efficient CMOS RF Power Amplifier With a 2-D Circuit Synthesis Technique. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 2851-2862	4.1	3
40	Parallel Transient Simulation of Multiphysics Circuits Using Delay-Based Partitioning. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, **2012**, 31, 1522-1535	2.5	3
39	Why it is so hard to find small radio frequency signals in the presence of large signals **2012**,		1
38	Comparison of modeling techniques in circuit variability analysis. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2012**, 25, 288-302	1	8
37	Accurate and Scalable IO Buffer Macromodel Based on Surrogate Modeling. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2011**, 1, 1240-1249	1.7	24
36	Distributed Passive Intermodulation Distortion on Transmission Lines. *IEEE Transactions on Microwave Theory and Techniques*, **2011**, 59, 1190-1205	4.1	59
35	Surrogate-Model-Based Analysis of Analog Circuits—Part II: Reliability Analysis. *IEEE Transactions on Device and Materials Reliability*, **2011**, 11, 466-473	1.6	17
34	Surrogate-Model-Based Analysis of Analog Circuits—Part I: Variability Analysis. *IEEE Transactions on Device and Materials Reliability*, **2011**, 11, 458-465	1.6	21
33	Unified Understanding of RF Remote Probing. *IEEE Sensors Journal*, **2011**, 11, 3055-3063	4	24
32	Inverse Singular Value Method for Enforcing Passivity in Reduced-Order Models of Distributed Structures for Transient and Steady-State Simulation. *IEEE Transactions on Microwave Theory and Techniques*, **2011**, 59, 837-847	4.1	19
31	Automated Broadband High-Dynamic-Range Nonlinear Distortion Measurement System. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 1273-1282	4.1	45
30	Thermal analysis and verification of a mounted monolithic integrated circuit **2010**,		4

29	A 6.2–7.5 GHz tunable bandpass filter with integrated Barium Strontium Titanate (BST) interdigitated varactors utilizing silver/copper metallization **2009**,		1
28	Narrowband Barium Strontium Titanate (BST) tunable bandpass filters at X-band **2009**,		4
27	Low distortion amplification of multisine signals using a time-frequency technique **2009**,		1
26	MI017 - Integrated microwave frequency tunable bandpass filter using barium strontium titanate varactors **2008**,		2
25	Wideband high dynamic range distortion measurement **2008**,		3
24	Electro-Thermal Theory of Intermodulation Distortion in Lossy Microwave Components. *IEEE Transactions on Microwave Theory and Techniques*, **2008**, 56, 2717-2725	4.1	76
23	Response of RF Networks to Transient Waveforms: Interference in Frequency-Hopped Communications. *IEEE Transactions on Microwave Theory and Techniques*, **2008**, 56, 2808-2814	4.1	40
22	Reflection Coefficient Shaping of a 5-GHz Voltage-Tuned Oscillator for Improved Tuning. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 2488-2494	4.1	4
21	Origin of the Half-Wavelength Errors in Microwave Measurements Using Through–Line Calibrations. *IEEE Transactions on Instrumentation and Measurement*, **2007**, 56, 1610-1615	5.2	4
20	Modeling the Nonlinear Response of Multitones With Uncorrelated Phase. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 2147-2156	4.1	5
19	Design for 3D Integration and Applications **2007**,		4
18	High-Q Solenoidal Inductive Elements. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		5
17	Transceiver cascade system analysis and design via a contribution method. *International Journal of RF and Microwave Computer-Aided Engineering*, **2006**, 16, 338-345	1.5	3
16	Capturing asymmetrical spectral regrowth in RF systems using a multislice behavioral model and enhanced envelop transient analysis. *International Journal of RF and Microwave Computer-Aided Engineering*, **2006**, 16, 400-407	1.5	2
15	Voltage Controlled GaN-on-Si HFET Power Oscillator Using Thin-Film Ferroelectric Varactor Tuning **2006**,		6
14	Behavioral Modeling of Quadrature Modulators for Characterization of Nonlinear Distortion **2006**,		1
13	Electro-Thermal Passive Intermodulation Distortion in Microwave Attenuators **2006**,		19
12	The applicability of Noise Power Ratio (NPR) in real communication signals **2006**,		2

11	Discrete Barium Strontium Titanate (BST) Thin-Film Interdigital Varactors on Alumina: Design, Fabrication, Characterization, and Applications **2006**,		13
10	A High K Nanocomposite for High Density Chip-to-Package Interconnections. *Materials Research Society Symposia Proceedings*, **2004**, 833, 185		2
9	Mathematical foundations of frequency-domain modeling of nonlinear circuits and systems using the arithmetic operator method. *International Journal of RF and Microwave Computer-Aided Engineering*, **2003**, 13, 473-495	1.5	9
8	Printed antenna design for broadband waveguide-based spatial power combiners. *Microwave and Optical Technology Letters*, **2003**, 36, 411-415	1.2	
7	Nonlinear analysis methods for the simulation of digital wireless communication systems. *The International Executive*, **1996**, 6, 197-216		6
6	Diode characterization in a coaxial mount. *The International Executive*, **1993**, 3, 114-117		
5	A coaxial test fixture for characterizing low-impedance microwave two-terminal devices. *Microwave and Optical Technology Letters*, **1993**, 6, 197-200	1.2	2
4	Nonlinear circuit analysis using the method of harmonic balance—A review of the art. Part I. Introductory concepts. *The International Executive*, **1991**, 1, 22-37		105
3	Nonlinear circuit analysis using the method of harmonic balance—A review of the art. II. Advanced concepts. *The International Executive*, **1991**, 1, 159-180		43
2	Computer-aided analysis of nonlinear microwave circuits using frequency-domain nonlinear analysis techniques: The state of the art. *The International Executive*, **1991**, 1, 181-200		25
1	The relationship between bivariate volterra analysis and power series analysis with application to the behavioral modeling of microwave circuits. *The International Executive*, **1991**, 1, 253-262		3